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Bulletin of the Massachusetts Archaeological Society, Vol. 29, No. 2

Massachusetts Archaeological Society

BULLETIN OF THE

MASSACHUSETTS ARCHAEOLOGICAL SOCIETY

VOL. 29 NO. 2

JANUARY, 1968

ARCHAIC DISCOVERIES AT FLAT RIVER

WILLIAM S. FOWLER

PUBLISHED BY THE

MASSACHUSETTS ARCHAEOLOGICAL SOCIETY, INC.

SOCIETY OFFICE, Bronson Museum, 8 No. Main Street, Attleboro, Mass.

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MASSACHUSETTS ARCHAEOLOGICAL SOCIETY BULLETIN, published in four Numbers of one Volume each year, commencing in October.

Price this issue $.75

(Subscription by membership in the Society: $3.00)

Note: Address all requests concerning membership to the Secretary; all orders for back Bulletin numbers (4 for $1.00 to members) to the Editor; and mail Society dues to the Financial Secretary. Exception: Classification (Stone Implements), Vol. 25, #1, and Classification (Products), Vol. 27, #3&4 — each $1.00 to members, $2.00 to non-members, both fully illustrated.

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ARCHAIC DISCOVERIES AT FLAT RIVER

by William S. Fowler

After excavations by the Narragansett Archaeological Society of Rhode Island at four sites along the shores of Narragansett Bay had produced little or no evidence of the Early Archaic culture, a search was made for a site in the uplands, where this earlier occupation was believed to have existed. Much time and effort was consumed before a likely site was located on the west side of Flat River in the township of Washington, Rhode Island. At this spot an elevated plateau covered with a growth of large pines extends back from the river, at the western end of which is a small flat clearing on a lower level. This field had been previously plowed and cultivated. Here and on top of the wooded elevation, test pits revealed chips and artifacts in sufficient quantity to warrant excavation. After excavating a small part of the field with limited success, a decision was made to concentrate activities on the wooded elevation just above.

Permission from the Quidnick Reservoir Company, owner of the land, was gladly given by Earle R. Fraser of West Warwick, to excavate the area and retain for study such artifacts as might be recovered. Results of the excavation as related in this report seem to be such as to justify the confidence of the owner in making the grant, which is herewith gratefully acknowledged.

Location of this site is well situated, as it lies near Flat River. This is a relatively wide stream of slow moving water, which extends for miles over flat terrain, passing between several lakes through an area that once must have been good hunting country. This river is a water thoroughfare without rapids or falls, which provided early man with a ready means of travel, as he moved back and forth in his hunting activities.

The work of excavating was commenced in the spring of 1963 and was terminated in 1966. It was under the direction of the author, who took measurements and made all recordings of artifacts whenever he was present, as they were uncovered. When he was absent, which represented only a small fraction of the entire time, recordings were made by his assistants under uniform instructions. This concentrated supervision permitted the director visual observation of nearly all recoveries, and produced uniformity of measurements. Also, it enabled close attention to examination of soil conditions surrounding artifacts that appeared out of context, in an effort to determine if disturbances were present, which might account for their dislodgment. The benefit of this centralized control will be reflected in several studies made of projectile point recoveries, especially those connected with the lowest zone of occupation. While such unified study of data at its source may tend to produce more accurate results, it should be admitted that any interpretation of archaeological evidence, no matter how carefully conceived, will only tend to reflect the truth — may never be more than an approach to an understanding of what actually took place.

THE SITE AND ITS GEOLOGY

Extending about three hundred yards west of Flat River stretches an elevated sandy plateau, which today is heavily forestated with large white and pitch pines. Along its southerly side runs a water course, a wide dredged outlet for Flat River Reservoir less than a mile distant. Formerly, this waterway was a marsh through which ran a fresh water brook, which still flows into the present sluiceway, but only during wet seasons of the year. Occupational evidence at the site occurred on the plateau at both sides of a deep gully, extending sharply down the southern bank of the elevation (Fig. 1). In this gully appeared a heavy layer of washed pebbles and cobbles, evidently the result of extensive water erosion. While the gully is dry today, its bed of large pebbles suggests the presence at some former time of a continuous flow of water, which cut its way through the bank to join the brook in the marsh below. This might well have been an active spring in aboriginal times, before a lowered water table had caused discontinuation of its flow. If so, it could have served as the reason for selection of this spot as a camp site. Suffice it to say, that test pits dug all the way from here to Flat River failed to reveal evidence of occupation, and no other deep gully exists from here to the river to suggest the former existence of continuous water erosion.

For a better understanding of the evidence that follows, it is important to review the geologic nature of the sandy plateau, which rises about 50 feet above the marsh. In geologic terms this is what is known as an outwashed plain of the late Pleistocene. It consists of assorted sand deposits and lenses of pebbles of various sizes, which have been spread over a relatively broad plain. At the close of the Ice Age as the ice melted, pebbles were dislodged from the ice, where they had gathered during the forward advance of the glacier. Also, meltwater spewed out sand, which had been picked up in the ice advance, and this formed the plain. As time passed, high winds made blowouts, and years later drifting sands filled them

in, leaving pebble lenses either exposed or only partially covered. During the closing centuries of this land-forming epoch, when shifting sand was continually changing the contour of the area, the first human occupants, Early Archaics, arrived, as the evidence will show. Apparently, they established their camp somewhat removed from the river, because of the spring at the gully. By this time, tundra growth must have existed to support the animals, which were being hunted — probably caribou for the most part, a tundra-fed animal — the principal quarry of Early Archaic hunters. This followed the preceding Paleo occupation of Fluted point hunters, evidence of which was absent at the site.

During the following thousand years or so a gradual accumulation of humus took place providing a tenuous base for tree growth, which at first is presumed to have consisted of scrub evergreens, probably of a stunted type, much as are found today in sandy areas on the Cape. However, as time passed and the Late Archaic era arrived, somewhere about 5,000 years ago, trees had grown somewhat and the land had become more thickly wooded, although probably it required another millennium or so before accumulation of humus was sufficient to support large trees. Finally, with the forest growth fully developed over a heavy concentration of humus, the greatest occupation of the site took place. This was during the Ceramic Age, but apparently was suddenly terminated before close of the period, perhaps on account of the drying up of the spring at the gully.

SOIL DISTRIBUTION

The site, which is relatively level, is covered with large pines, some of which are a hundred or more years old, estimated from actual borings made in their trunks. Here and there are the rotten stumps of earlier trees, which have long since disappeared. This forestated condition indicates that for a long time this area has not been disturbed by cultivation of any kind. And furthermore, at no place during its excavation appeared plowshare marks or the clear cut demarcation between humus and subsoil, which are indicators of a plowed condition. Therefore, it may be safely assumed that the area excavated has not been disturbed by modern exploitation other than possibly that of logging, which in no way has changed the distribution of soils from aboriginal times down to the present.

Measuring down from just under a heavy leaf mold occurs a 6 to 8" deposit of acid black humus with a light mixture of sand. Its base is marked by a light brown deposit varying from 1 to 2" in thickness, which has been designated as Junction. It was

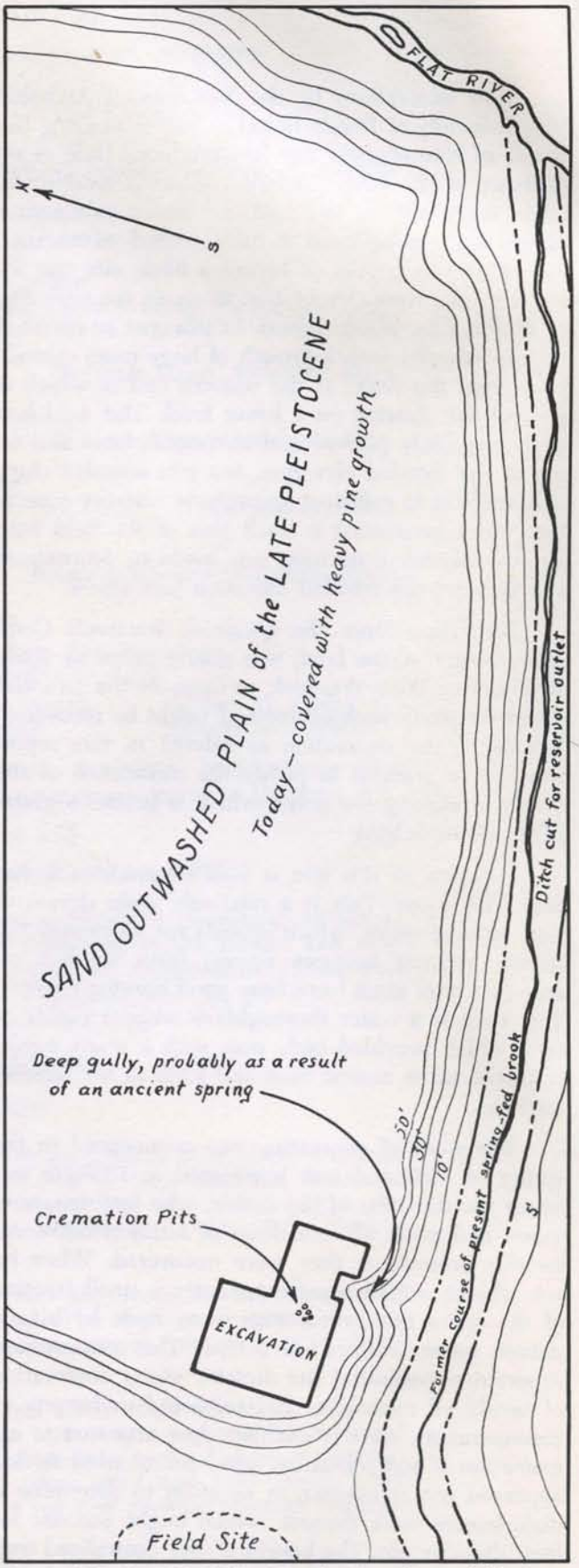

Fig. 1. MAP OF FLAT RIVER SITE. Showing adjacent field site at foot of elevation.

formed over the years by humus leaching into the yellow sand to produce this light brown wavy stratum separating humus from subsoil. Below this extends a deposit of fine yellow sand, which varies greatly in depth. Extending over about three quarters of the site this subsoil measures about 12 to 15" in depth, below which in some places occurs white sand, in others a deposit of large pebbles. However, through much of the sandy layer appear scattered glacial-worn pebbles of various sizes, which are consolidated into pebble lenses over about a quarter of the site. These usually occur just under the humus. When they were encountered, and after repeated efforts to excavate into them with no signs of occupation of any kind appearing, it was judged that these pebble accumulations were present when the first settlers arrived, and were either lived upon or about, but not below. However, enough sandy subsoil existed unspoiled by pebbles, in which artifacts were found, to enable stratigraphic separation of early from later occupations over much of the site.

DISTURBANCES

Unlike village sites, this station seems to be more of a hunting site, which was used intermittently over short periods of time. As such, refuse pits were not as necessary as in the case of more permanent camps. Therefore, it was not surprising when only a relatively few were encountered. This in itself was beneficial, since it partially removed one of the greatest causes of disturbance found at most sites, which tends to raise artifacts from their original level of deposition. However, other natural disturbances were in evidence, such as animal burrowing, root upheavels, and water erosion, to say nothing about normal disturbances caused by the aborigines themselves, as they moved about the area, treading artifacts deeper into the soft ground or kicking them into declivities, which usually abound.

Nevertheless, in spite of all such disturbances and aided by the absence of plowing, it has been possible to reach reasonable conclusions as to culture levels, by noting the position of artifact types appearing free of discernible disturbances, and paying attention to their source depths and frequencies at various levels.

METHODS OF EXCAVATING AND RECORDING

The grid system was used, in which 6 foot grids were laid out from a base line on an east-west axis that was run along the front of the plateau. Excavating was performed with trowels and sawed-off hoes by horizontal scraping of 15" benches across the laid-out squares, after bench faces had been previously exposed into the subsoil. When an artifact was uncovered, vertical measures were taken with the use of a level for accuracy — English long measure to the nearest inch — from artifact to bottom of leaf mold, and from artifact to center of Junction, with a recording made of the soil layer in which it occurred. Also, the square and position of artifact in the square where found were recorded. All records were made on printed forms, one for each recovery, which were numbered numerically at the end of the day, with each corresponding artifact receiving a duplicate number. A large percentage of artifacts were fragmented, but only those which could be definitely identified as belonging to some classified type were recorded and given a number. Finally, at the end of each day's work, data was transferred from the field records onto a master chart by the director. This provided a running account of depths of each artifact type, listed in respective columns allotted to each. In this way, a cumulative record was maintained for each type of artifact, showing the quantities and varying depths of each. Also, a horizontal graph of the grids was filled in each work day, showing in the squares dug location of the recordings made. The advantage of such a continuing record lies in the opportunity it affords for a quick and up-to-date review of the work done at any given time. This enables an early evaluation of artifact types as related to probable culture zones of occupation. Such constructive analysis of the evidence as it develops helps to form an early understanding of the site, and to clarify each new piece of evidence as it occurs.

Total excavated area covered was 15,696 sq. ft., and 628 recordings were made, exclusive of pits and stone hearths. As previously stated, there were relatively few refuse pits, but 29 stone hearths were uncovered at different levels, details of which will appear in the section on zone recoveries.

ZONES OF OCCUPATION AND CACHES

A careful evaluation of implement types was made, based upon the Massachusetts Archaeological Society's *Classification of Stone Implements of the Northeast*, Bulletin, Vol. 25, No. 1. It concerns their frequency and stratigraphic positions as compared with similar data at other sites in the surrounding region. As a result of this study, it has been possible to recognize four separate zones in which artifact changes occur. While zone limits are arbitrary as to measurements, they were made so as to conform to the change in diagnostic artifact traits, which takes place from one to the next. And this, after all, is a determining factor in seeking the truth about culture sequence. In naming the zones, the corresponding culture of each, as determined by artifact content, will be added.

Zone 1 (Early Archaic — Caribou Hunting). This lowest occupational horizon extends from 10″ up to 3″ below Junction; is in the yellow sand subsoil.

Zone 2 (Late Archaic — Stone Bowl Making). Still in the sand subsoil, this zone reaches from 2″ below, up to Junction.

Zone 3 (Age of Merger — Stone Bowl to Advent of Pottery). Including Junction, this horizon extends to 1″ above Junction in the humus.

Zone 4 (Ceramic Age — Pottery Making and Warfare). This last culture layer is entirely in the humus, and reaches from 2″ above Junction up to bottom of leaf mold.

Description of artifact types referred to in this report will be found in classification Bulletins of the Massachusetts Archaeological Society, Vol. 25, No. 1 (Stone Implements), and Vol. 27, Nos. 3 and 4 (Products). Only type names without descriptions will appear in this report, using those as found in the Society classifications. However, a chopping tool type, one projectile point type, and one drill type, appearing at the site in sufficient frequency to justify their inclusion as new discoveries, will be named and described with illustrations of representative specimens recovered.

Caches. Two caches of worked blades were uncovered, but due to insufficient evidence neither could be definitely placed in the zone to which they belonged. The first cache consisted of 15 roughly worked blades of red felsite. They began to appear in the center of the humus layer. However, no signs of a pit were detected, while the artifacts continued to appear at intervals down to about 4″ below Junction. None could be identified as filling the requirements of any known implement and are presumed to have been worked blanks for future implement manufacture.

The second cache also consisted of worked blades of red felsite. However, in this case there were 19 pieces, some of which could be identified as probable implements: 1 Stem knife, 2 crude clubs, and 1 Oval scraper. They were distributed throughout an area of about 2 ft. in diameter and from 9 to 23″ below the leaf mold in the subsoil. There were no charcoal or other deposits to indicate the outlines of a pit. However, since the first of the blades appeared about 2″ below Junction, it may be that the cache belongs in Zone 2 of the Late Archaic. In apparent confirmation of this hypothesis, the base of an Eared #4 point of that age appeared among the deepest blades.

Excluding these caches, most of the remaining excavated artifacts apeared in such a way as to make possible their placement in some one of the four zones. A description of them follows, commencing with the contents of the lowest and earliest zone, then progressing upward through the remaining zones.

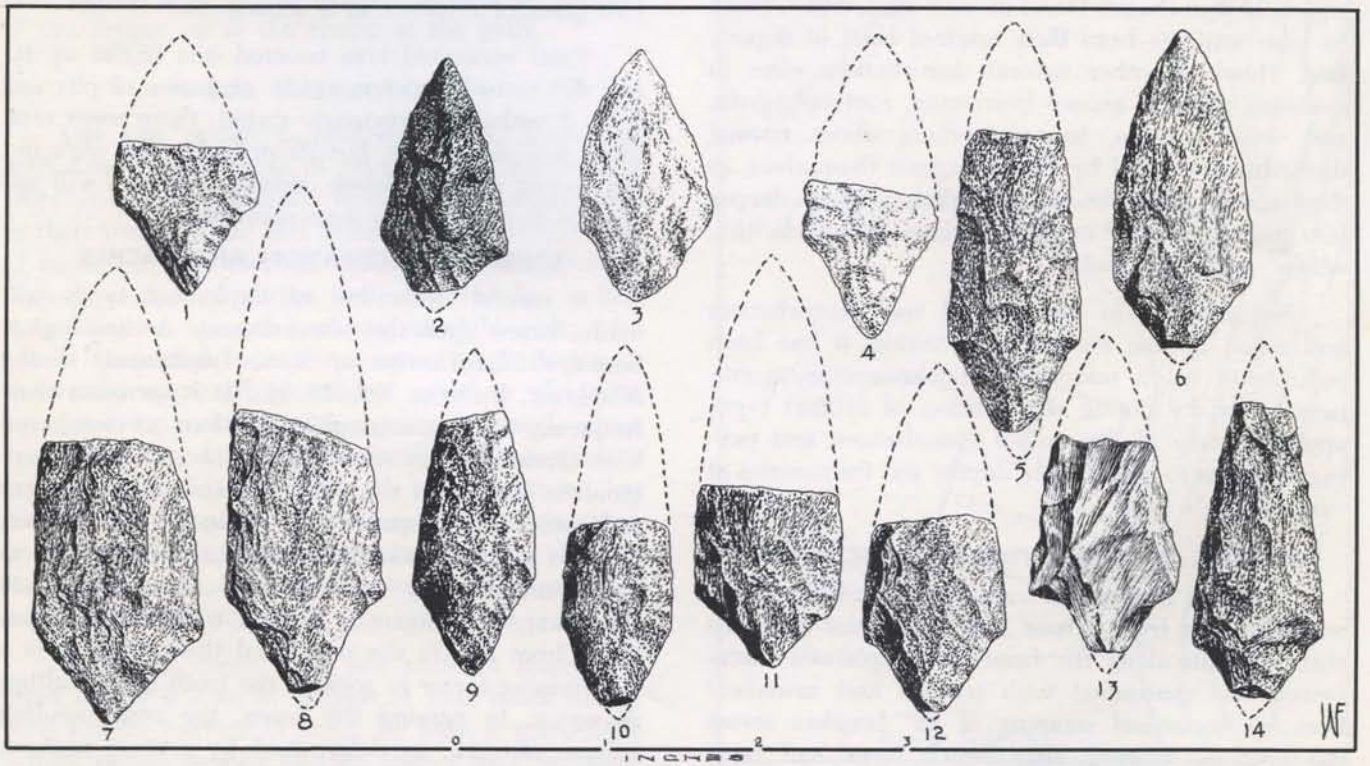

Fig. 2. ZONE 1 (Early Archaic), Flat River Site. 1-6, Corner-removed#8 Point (out of context in upper zones, but associated with observed disturbances); 7-14, Corner-removed#8 Point (undisturbed in Zone 1).

ZONE 1 RECOVERIES (Early Archaic - tundra)

A limited use of the site is suggested at this early age, since this low level contained only 4 small stone hearths, and but 36 artifacts, of which 14 were projectile points: Corner-removed#5, 8, and Parellel Stem.

Corner-removed#8 Point (Fig. 2.) A diagnostic artifact of the Early Archaic at other sites in the Northeast and elsewhere, this point also appeared at Flat River, where 8 specimens occurred in Zone 1. Of these, 2 appeared an inch above, but were nevertheless included. Justification for their inclusion stems from the reasoning that since this type of point is weighted in numbers in the lowest zone, its appearance only an inch above should probably be considered a marginal component of the lower assemblage — allowing for unevenesses in the formation of this stratum. Besides these specimens in Zone 1, there were 10 more of the same type appearing in upper zones. Apparently, they were out of context, since 6 were surrounded with disturbances, which evidently had lifted them from lower levels. These disturbances were observed as follows: streaks of yellow subsoil or scattered pebbles in the humus, indicating animal digging or other kinds of dislodgment from lower strata; charcoal flecks suggesting pit digging; extensive root systems producing upheavals; and hearth-making disturbances. Illustrations appear of all Corner-removed#8 recoveries, except the 4 in upper levels, which were without evidence of a disturbance to account for their presence above their Zone 1 source.

A study of the 14 illustrated specimens reveals that most shoulders, just above the tapering stem on 10, are ground slightly, apparently to remove their sharp edges. This treatment of projectile points is a recognized trait of the preceding Paleo Age, and its appearance again on Corner-removed#8 points seems to confirm their relative antiquity, and represents evident continuity of this manufacturing technique. Furthermore, in the selection of stone materials it is of interest to note a preference for quartzite, with 10 of quartzite, 2 of quartz, 1 of felsite, and 1 of argillite.

All of this evidence seems to establish the Early Archaic era as belonging in Zone 1. But that which is of even greater significance was appearance at this low level of apparently a new projectile point type for the Northeast. All told 6 recoveries of it were made, 5 *in situ* in Zone 1, and one — skillfully wrought and true to type — obviously out of context in the loam. Around it was an extensive root system, which may have had something to do with its probable dislodgment from Zone 1. All six are made of hard quartzite, and the type has been named for its unique style of stem. The flaked workmanship on 5 of these points is excellent, while 1 exhibits inferior working, although its shape tends to conform to the type. A description of this point type follows.

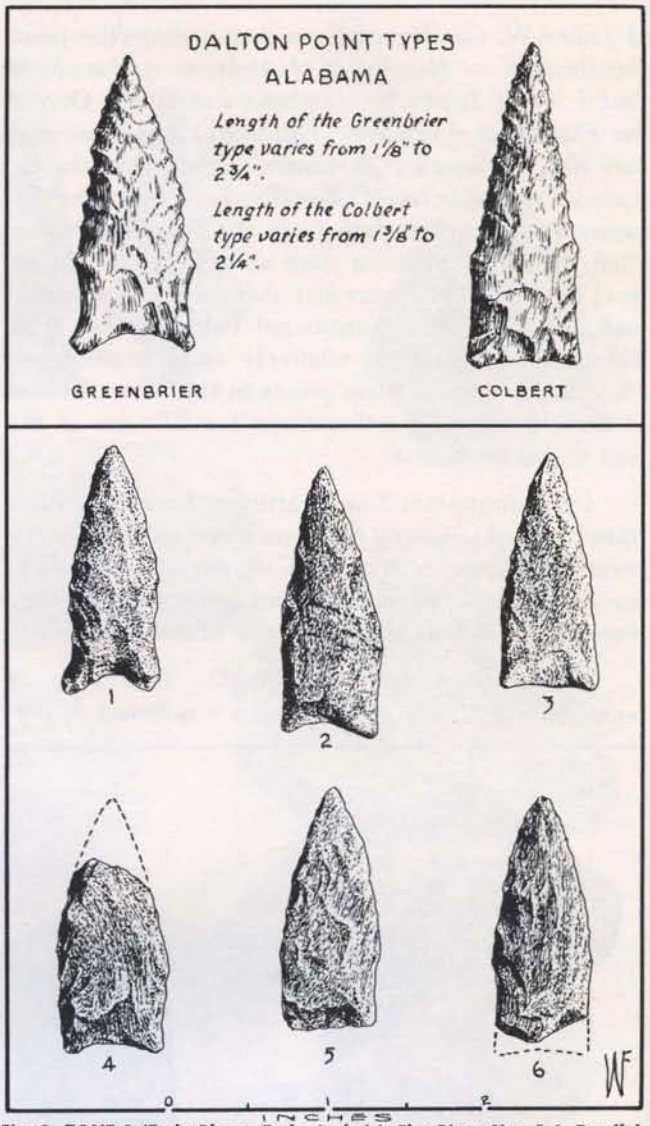

Fig. 3. ZONE 1 (Early Phase, Early Archaic), Flat River Site. 1-6, Parallel Stem Point (resembles Dalton point types — courtesy James W. Cambron). #2, out of context in upper zone, all others in Zone 1.

Parallel Stem (Fig. 3). This point measures more than 1½" in length. Its stem is 9/16 to ⅝" wide, which makes it suitable for a spear point. The stem has more or less parellel sides, which are retouched and extend ½" or more up from the base; are slightly ground on 5 of the 6 recovered specimens. This grinding trait is absent on the 1 crude specimen. The reworked sides and slightly concave base tend to produce basal ears— sometimes quite prominent — while the base is thinned, suggestive of fluting in some cases. The point end tends to be steeple-shaped, which is a prominent trait when the point is expertly made, as with the 5 specimens. This type seems to have its counterpart in the "Dalton" point of Alabama. For the purpose of comparison, illustrations of the two Dalton styles are shown in upper frame of Fig. 3, copied by permission

of James W. Cambron from a recent projectile point classification — *Handbook of Alabama Archaeology, Part 1, Point Types*, by Cambron and Hulse. One of the Flat River specimens (Exhibit#1) has prominent ears like Alabama's "Greenbrier" style, while the remainder resemble the "Colbert" style of that area. Because a radiocarbon date from the Stanfield-Worley Bluff shelter in Alabama gave an age for the Dalton level of about 9,640 years ago, this point in the Southeast is considered a transitional Paleo-Archaic type. This, then, suggests a relatively early position for Flat River's Parallel Stem points in the Early Archaic of Zone 1, allowing millenniums for diffusion of the trait to the Northeast.

Other important Zone 1 artifacts have been illustrated (Fig. 4). Among them, only one more projectile point type appears. This and all remaining artifacts from all zones as illustrated actually appeared in their respective zones as shown by the drawings.

Corner-removed#5 (Exhibit#2). This type of point, of which only one specimen was found, is perhaps as diagnostic of the Early Archaic as Corner-removed#8. It was much in evidence at the Twin Rivers site in this early level — Society Bulletin, Vol. 14, No. 1.

Corner-removed#8 Drill (Exhibits#3, 4). Two specimens were recovered in Zone 1 and they are both made of hard quartzite. This appears to be a discovery of a new drill type. It is allied to the Corner-removed #8 point, as it has the same pointed base. It has parallel shoulders, which are lightly ground.

Leaf Knife (Exhibits#5, 6, 11). This kind of knife, held to be diagnostic of the Early Archaic, is represented by 3 specimens appearing in Zone 1. In addition, a fractured base of one of these knives made of quartzite, not illustrated, was found lying nearby a stone hearth 7″ below Junction. It showed signs of having been exposed to sand blasting, as its chipped edges had been eroded, producing an all-over smoothed condition. Also, Exhibit#6 of red argillite shows the same eroded surfaces from sand blasting.

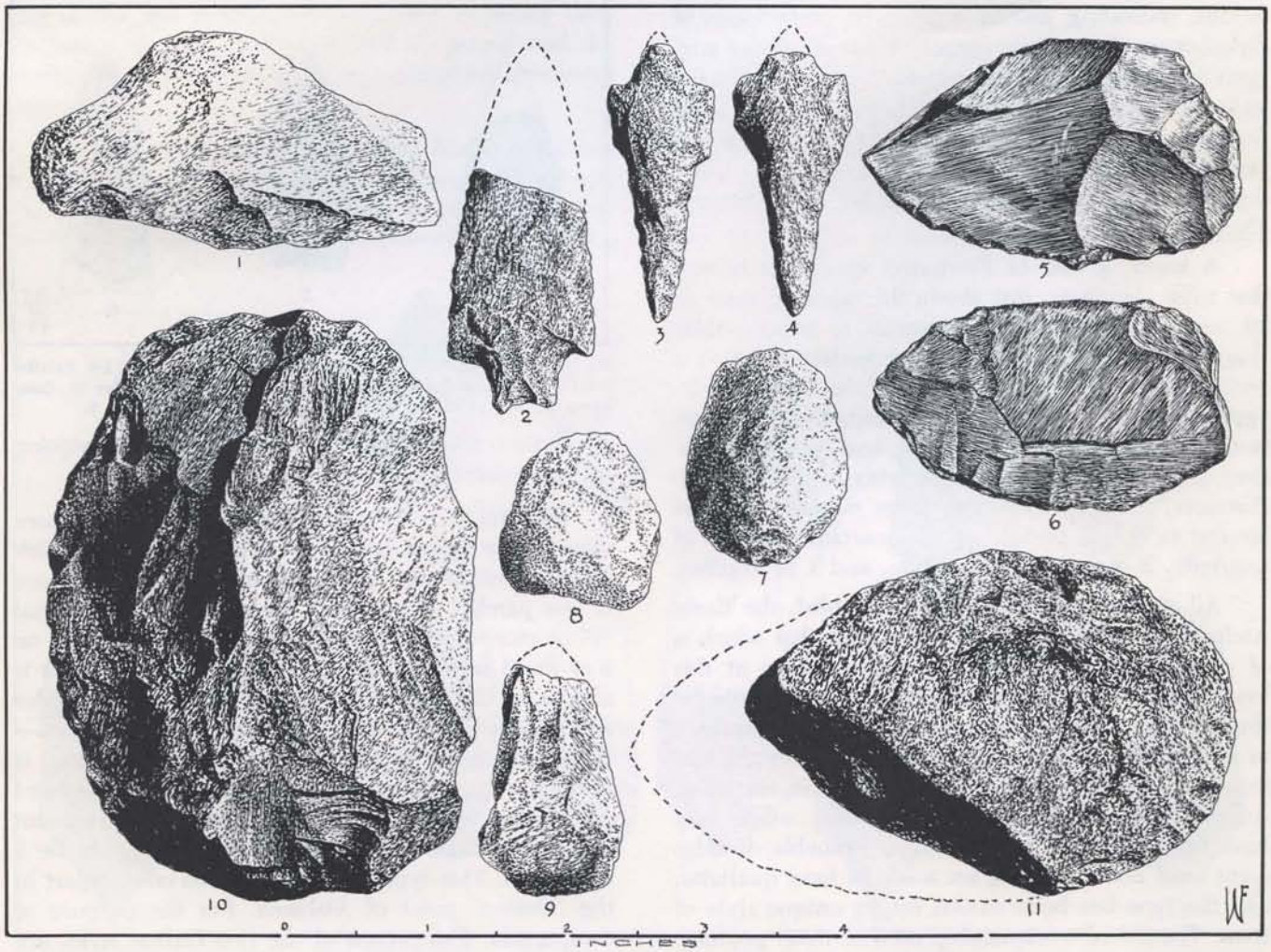

Fig. 4. ZONE 1 (Early Archaic), Flat River Site. 1, Hammerstone; 2, Corner-removed#5 Point; 3, 4, Corner-removed#8 Drill; 5, 6, 11, Leaf Knife; 7, 8, Steepedge, 9, Stem Scrapers; 10, Chopping Tool.

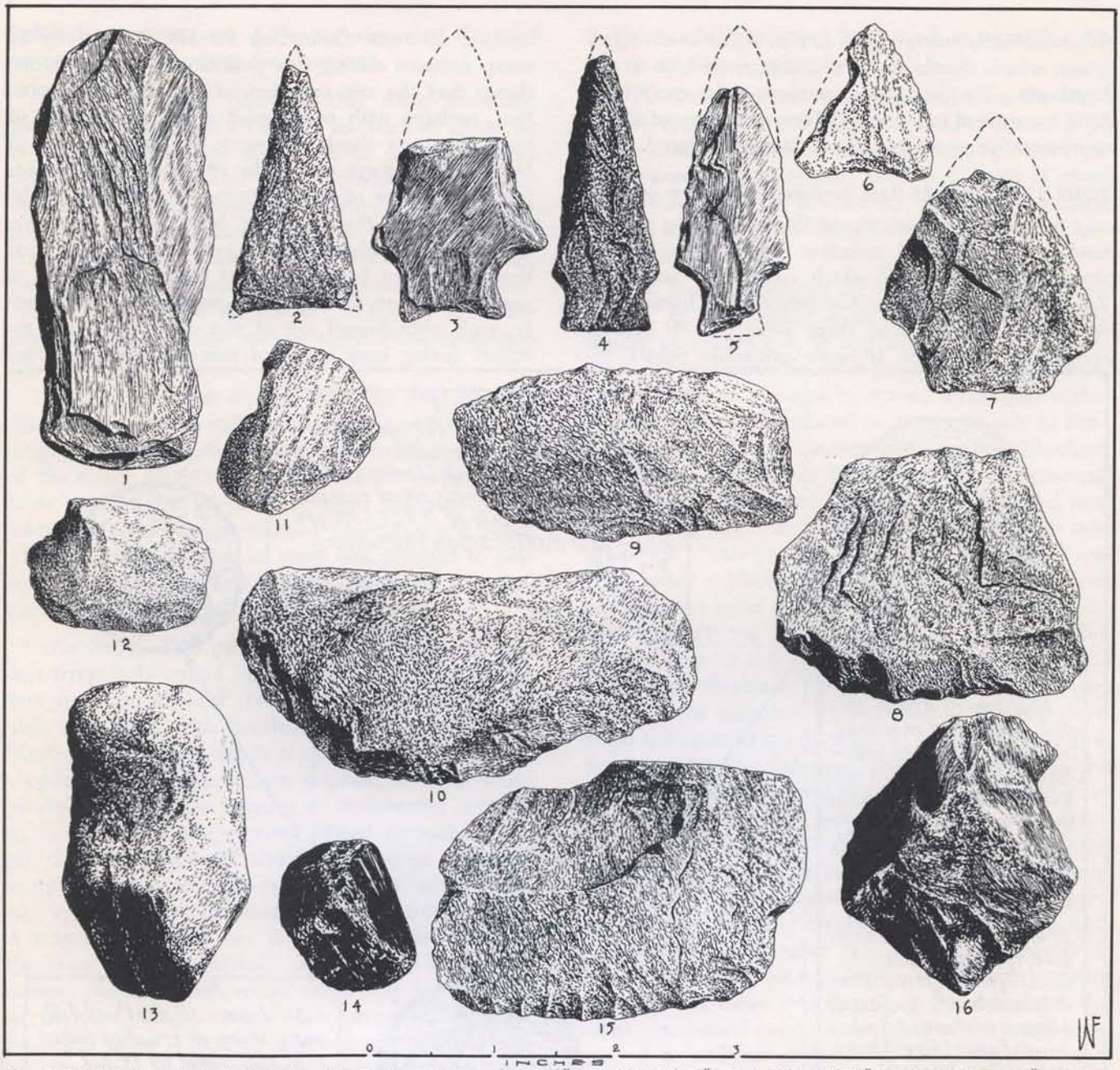

Fig. 5. ZONE 2 (Late Archaic), Flat River Site. 1, Stem Scraper; 2, Eared#2, 3, Side-notched#1, 4, 5, Side-notched#5, 6, Small Triangular#4, Corner-removed#1 Points; 8, Flake, 9, Stemless, 10, Stem Knives; 11, Flake, 12, Steepedge Scrapers; 13, Shaft Abrader (woodworking); 14, Hammerstone; 15, Notcher (woodworking); 16, End Pick.

Chopping Tool (Exhibit#10). This seems to be another discovery of a new tpye of tool for this area. Of 3 recoveries made in this low zone, only the most well-shaped one of felsite is illustrated. It is known by the same name in Pennsylvania, and may be described as an oval shaped tool, made of fairly thick, tough stone, sometimes showing side notching for hafting. It is bifacially chipped with relatively large flakes having been removed, and varies from about 4 to 6″ in length. In the case of the illustrated specimen, a short distance on the edge at one side is left unworked, perhaps to facilitate hafting of the tool. This presumably took place, since one end only of the implement shows wear from pounding; is not smoothed over from scraping, as in the case of Oval scrapers. It differs from an Oval scraper in that it is made of hard stones, and was apparently hafted to improve its use in chopping. Oval scrapers, on the other hand, were not hafted, and although they have a similar shape in large sizes, display wear from scraping on most edges, not from pounding; are therefore a hand scraping tool, and so are quite different from the Chopping tool. Also, they are not diagnostic of any culture period.

As this Chopping tool is considered diagnostic of the Early Archaic in Pennsylvania, its appearance in

this same early culture zone at Flat River seems significant, which should make it a diagnostic trait in the Northeast. The remaining artifacts recovered from Zone 1 consist of scrapers and Hammerstones, of which representative specimens have been illustrated.

ZONE 2 RECOVERIES (Late Archaic - scrub tree growth)

A noticeable condition at this level is the sparseness of occupational remains. There were only 8 stone hearths, some of which could well belong to Zone 3 just above, due to the difficulty in determining their exact depths. And there were but 39 artifact recordings, of which 16 were projectile points, including 10 from Cremation Pit No. 5. Scarcity of camp remains during this period can mean but one thing, that the site experienced but limited occupation, perhaps with unoccupied gaps of hundreds of years between short stopovers by small groups of hunters. This scant use of the site probably accounts for the absence of many diagnostic artifacts of the age, especially that of stone bowls. Their absence, however, is doubtless attributable to the fact that they would not have been part of the equipment of nomadic hunters as being too cumbersome. Obviously, such abbreviated use of the site might have resulted during long lapses of non-use in an accepted

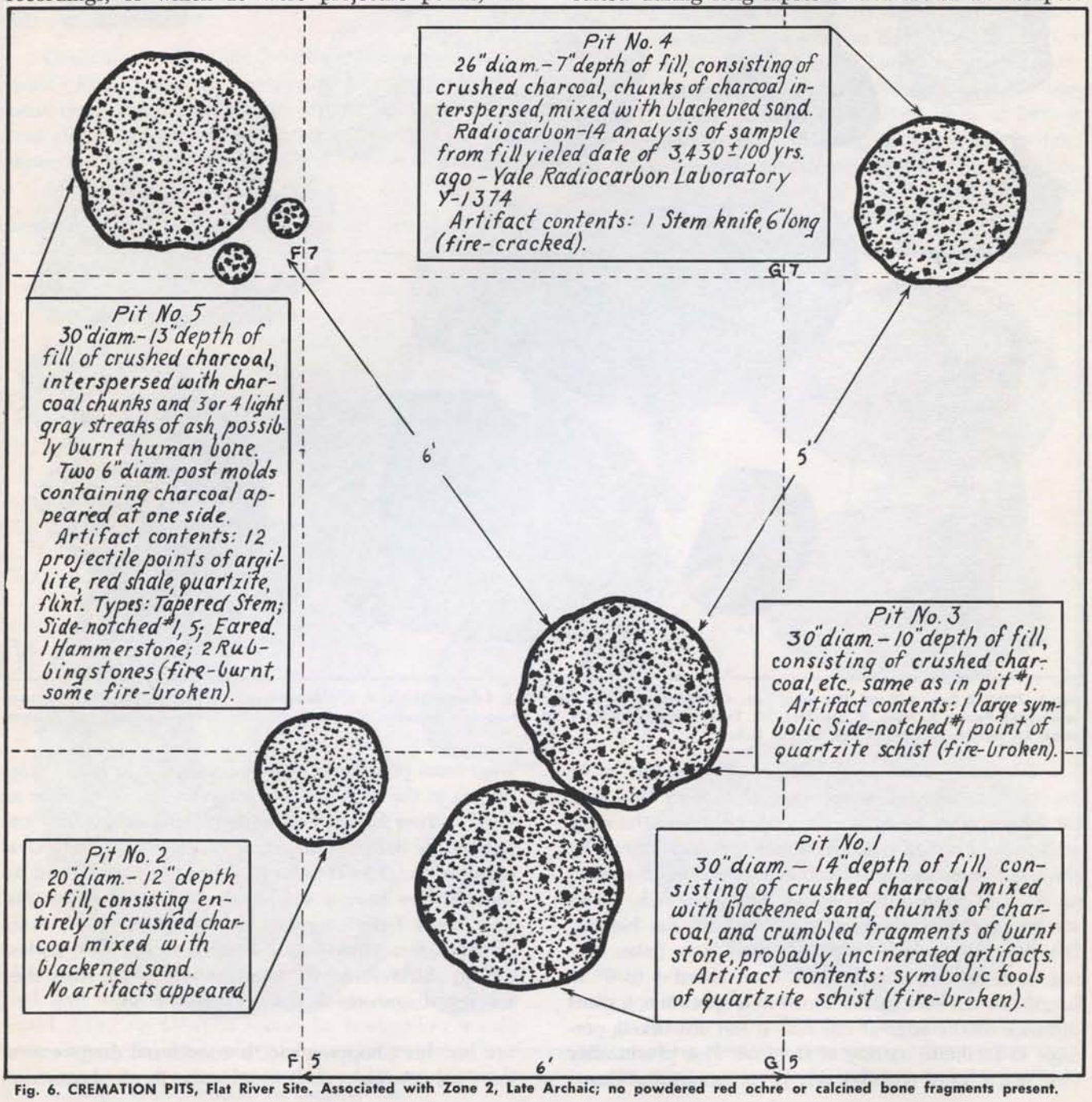

Fig. 6. CREMATION PITS, Flat River Site. Associated with Zone 2, Late Archaic; no powdered red ochre or calcined bone fragments present.

belief by contemporary Late Archaics, that this was an undesirable location for camping.

Projectile point types of this zone, including those from cremation Pit No. 5, are such as might be expected, as they are diagnostic of the stone bowl industrial age: Tapered Stem, Eared#1 and 2, Side-notched#1 and 5, Small Triangular#4, and Corner-removed#1. The balance of recoveries consists of scrapers, rubbing stones, knives, woodworking tools, End pick, and Hammerstones, representative specimens of which are illustrated (Fig. 5), including projectile point types, except those from cremation Pit No. 5.

Apart from such limited data, the most exciting discovery in Zone 2 was the uncovering of 5 relatively large pits, believed to be associated with cremations of the dead. All but one contained fire-cracked artifacts imbedded in deposits of black charcoal mixed with sand, but none contained powdered red ochre (Fig. 6). A description of them will attempt to present all factual evidence involved, of which an interpretation will be found in the conclusion.

Pit No. 1. This pit appeared in square F-5, and was irregularly round with about a 30″ diameter. It first appeared about 4″ below Junction in the subsoil and was filled with crushed charcoal mixed with blackened sand to a depth of about 14″. In this were chunks of charcoal and many deposits of burnt white powdered stone, the remains of incinerated artifacts as further excavating proved. Mixed throughout the pit down to about 4″ above the bottom appeared burnt fragments of artifacts, which later, when cleaned, were found to be made of soft quartzite schist. A surprising feature was that all fragments were of the same stone, apparently derived from a common source. Subsequently, many fragments were found to be contiguous, which when cemented together formed 5 tools. Although only one is complete, they can doubtless be identified as a Hand gouge, Stem scraper, Hand spade, and 2 Stemless knives. However, they appear oversized and are coarsely flaked, not like functional tools but more as symbolic ones, having the shapes but lacking the refined traits of usable implements (Fig. 7,#2-6). They have more or less flat faces, indicating that they are made from slabs of the soft quartzite schist. In addition to those illustrated, there must have been 5 or 6 more to judge from the remaining fragments, which lacked parts to complete them. All were badly fire burnt, some with edges crumbling from extreme heat, which attests to the softness of the stone. Evidently, the burnt powdered stone remains in the charcoal fill of the pit were the missing components of these artifacts. The charcoal fill was underlaid by coarse gravel and pebbles, which did not lend itself to revealing the effects of fire discoloration.

Pit No. 2. About a foot removed from Pit No. 1 in the same square occurred a smaller rounded pit at the same level, which was filled with crushed charcoal mixed with blackened sand to a depth of about 12″. Unlike the first, it contained no charcoal chunks, and no artifacts either fragmented or in a burnt powdered condition.

Pit No. 3. Adjoining Pit No. 1, as though it were a part of it, another large disturbance appeared, mostly in square F-6. It was first noted at the same level, but as excavation of it proceeded, its blackened fill was seen at one spot to extend upward to within 2″ of Junction. This placed its origin, clearly in Zone 2. It proved to be another more or less circularly shaped pit, which was filled with crushed charcoal and charcoal lumps like the first, with blackened sand intermixed, but with somewhat less depth of only about 10″. Near the upper few inches appeared one fragmented artifact, which was observed to have been made of the same quartzite schist as that of the artifacts from Pit No. 1 (Fig. 7, #1). It had been worked from a slab of this relatively soft stone like all the others, and therefore, the pit is presumed to be a part of the same complex. This artifact is a crude oversized imitation, it would seem, of a Late Archaic projectile point type, Side-notched#1. It is ill shaped by quick percussion flaking, is too large, and lacks a required sharp point to have been useful as a spear point. Therefore, it too seems more symbolic than functional, as though it had been made in a hurry to resemble its type counterpart, but without regard for size and finishing touches to make it useful as a missile. After comparing this artifact evidence with that from the first pit and finding it similar, it appears obvious that these two large pits were used for the same ceremonial event; were open at the same time, and were utilized probably as one crematory unit, rather than separately. Therefore, since Pit No. 3 has been shown to belong to Zone 2, Pit No. 1, and most likely Pit No. 2 as well because of its close proximity, also have the same Late Archaic affiliation.

Pit No. 4 and Radiocarbon Date. About 5 feet removed from Pit No. 3, a fourth slightly smaller irregularly shaped circular pit with a diameter of 26″ appeared in square G-7. Its charcoal blackened fill was similar to the two former large pits, but its 7″ depth was somewhat shallower. In the fill occurred a large Stem knife 6″ long, which had been badly fire burnt and cracked from extreme heat that had almost obliterated all flaked scars (Fig. 8,#1). Damage had been so complete that the kind of stone used is unrecognizable. However, enough distinguishing

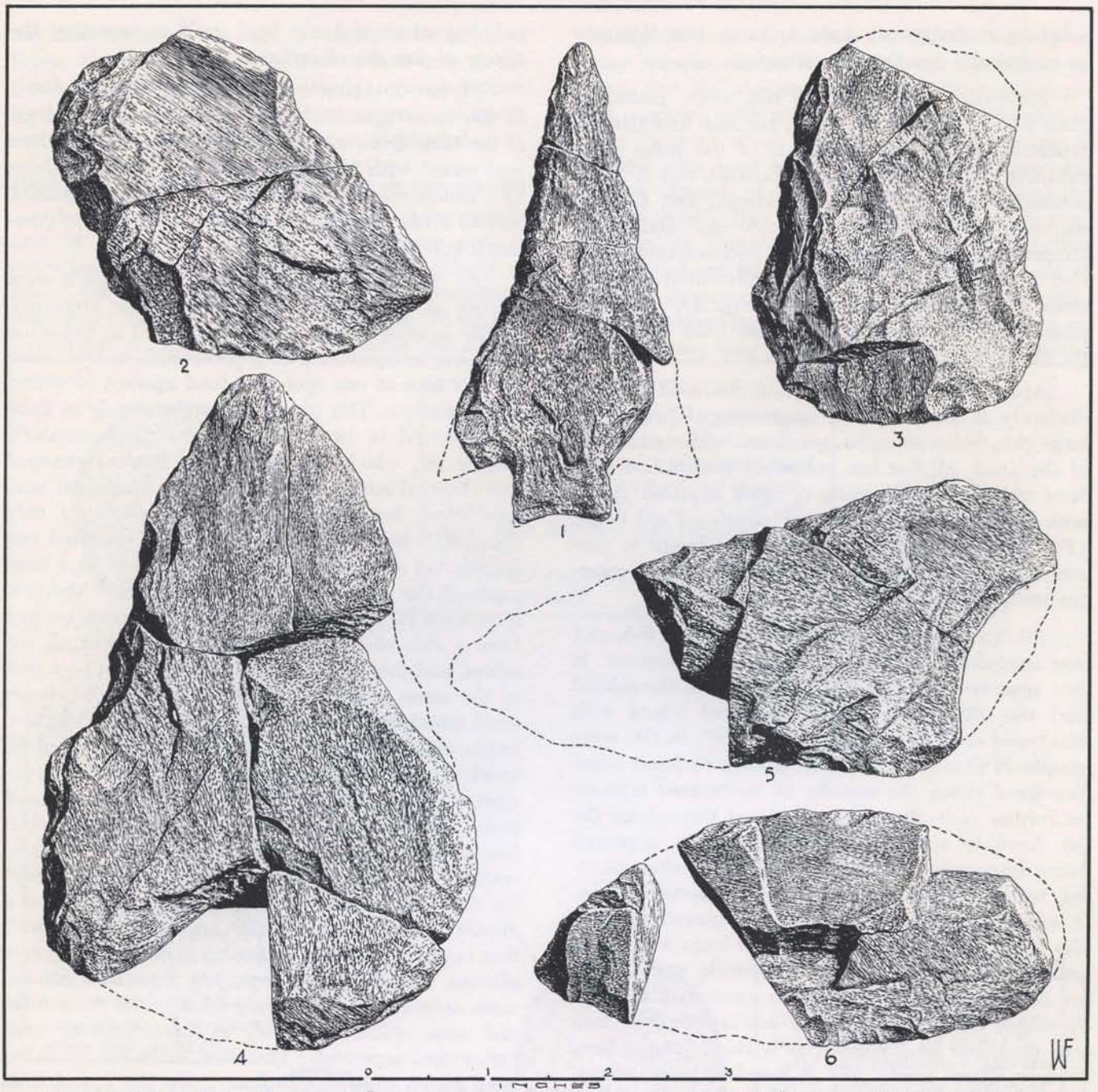

Fig. 7. INCINERATED ARTIFACTS (Cremation Pits#1, 3), Flat River Site. Symbolic tools: 1, Side-notched#1 Spear Point (Pit 3). 2, Hand Gouge, 3, Stem Scraper, 4, Hand Spade, 5, 6, Stemless Knives (Pit 1); all from slabs of quartzite schist.

traits remain to indicate that this knife had once been a functional tool made of durable stone.

A charcoal sample from the pit was carefully preserved in foil and soon after was placed in an oven for 20 minutes in 450° heat to kill any harmful recent microorganisms, which might otherwise have contaminated the charcoal. Subsequently, it was submitted for analysis to the Radiocarbon Laboratory of Yale University. Their processing of this sample — Y-1374 — gave a date of 3,430 ± 100 years before 1950. This date of about 3,500 years ago is believed to be the first published radiocarbon measure in New England from charcoal derived from a probable cremation pit or crematory. Therefore, it assumes an important part of this report, and will be referred to again in the conclusion.

Pit No. 5. Separated from Pit No. 3 by about 6 feet in square E-7 occurred still another irregularly shaped circular pit with a diameter of about 30″, similar in size to the first two large ones. It lay about 7 feet away from Pit No. 4, and, as will be shown further along, probably was contemporaneous with it. A new feature connected with Pit No. 5 appeared at one place just outside its periphery. Two 6″ diameter

deposits filled with small charcoal chunks extended down the full depth of the pit. About 5 to 6″ from the bottom their diameters began to diminish, and finally tapered to nil. Because of this, they are presumed to be the remains of pointed posts driven into the sand, which were consumed at the time of the cremation. Pit No. 5 contained more or less the same kind of charcoal fill as all the other large pits, with charcoal flecks appearing at the top, and with big chunks intermixed throughout. The fill, which had a depth of about 13″, contained three or four streaks of a light gray substance here and there, wihch may have been incinerated human bone. The top of this pit and that of Pit No. 4 were as much as 7 to 8″ below Junction, which will be explained in the conclusion.

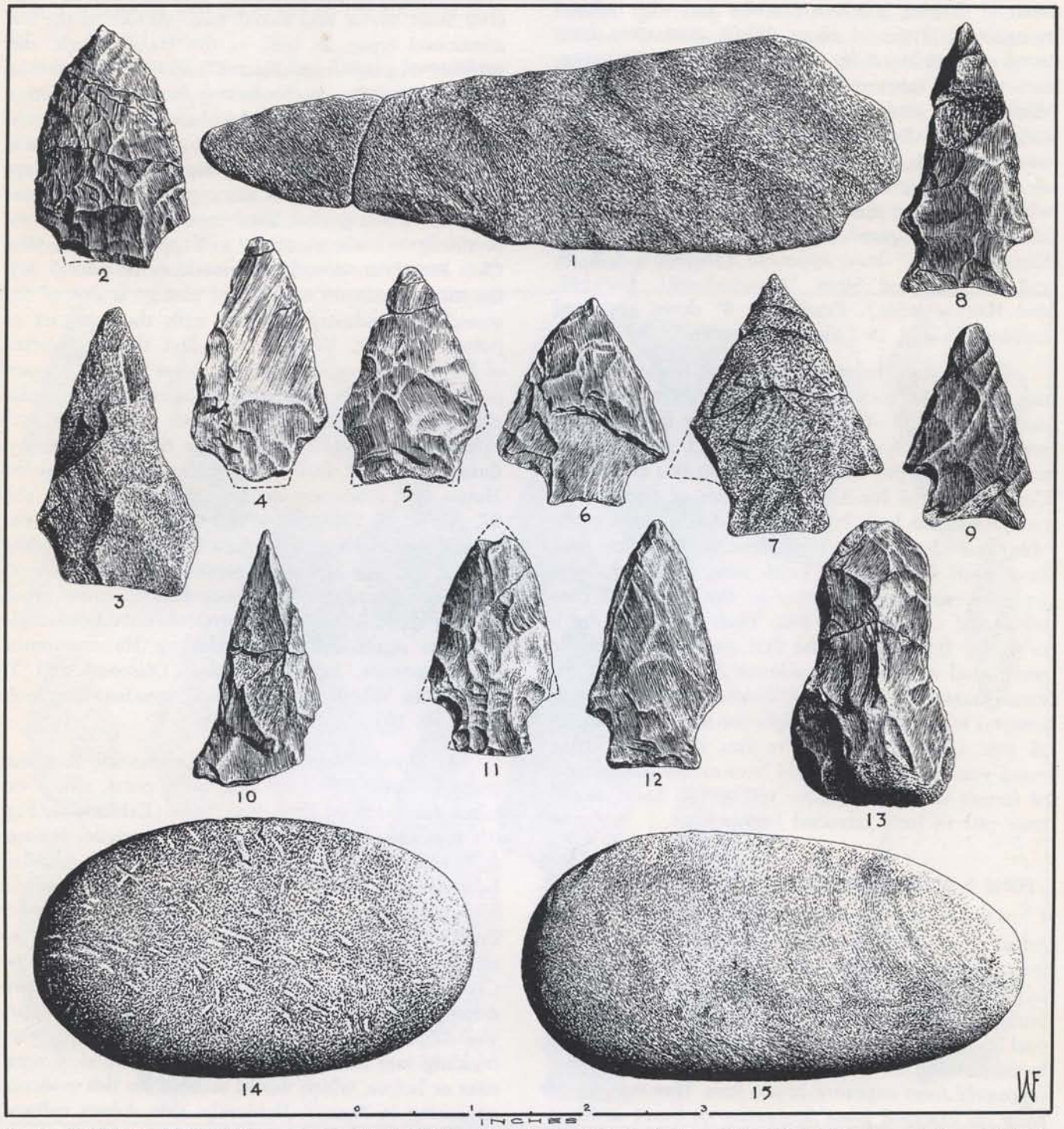

Fig. 8. INCINERATED ARTIFACTS (Cremation Pits #4, 5), Flat River Site. Functional Tools: 1, Stem Knife (Pit 4). 2-4, Tapered Stem, 5-7, Side-notched#1, 8, 9, Eared#1, 10, Fragmented Blade, 11, 12, Side-notched#5 Points; 13, Hammerstone; 14, 15, Rubbing Stones (Pit 5). Stone materials used: Argillite, Quartzite, Flint; Felsite with large phenocrysts, and Sandstone, for Rubbing Stones.

Perhaps the most significant feature of Pit No. 5 was its artifact content (Fig. 8,#2-15). All implements appeared within the first 4" of fill, and the projectile points are of Late Archaic types. It will be noted, as compared with Pits Nos. 1 and 3, that implements from this pit have the appearance of being functional and not symbolic. For example, the projectile points have relatively sharp points, with refinement of shaping, moderate in size and with definite recognizable types of bases. While most were fractured and fire-burnt, by careful excavating most fragments were recovered and restorations completed. While many pieces were badly burned, some stone materials can be identified from which they were made: argillite, flint, felsite, and quartzite. At the top of the pit appeared Exhibit#6 (Side-notched#1), while 2" down in the fill occurred Exhibits#2, 4, 5, 9, 11, and 12 (Tapered Stem, Side-notched#1, 5, and Eared#1). At 3" down appeared Exhibits#3, 7, 8, 10, and 13 (Tapered Stem, Side-notched#1, Eared#1, and Hammerstone). Finally, at 4" down appeared Exhibits#14 and 15 (Abradingstones).

Immediately below the charcoal fill at the bottom of the pit occurred clear sand, in which were noted reddish fire-burnt patches. This indicates the presence of excessive heat, which had penetrated to the base of the pit, attesting to its use as a crematory. Considering the functional character of the artifact recoveries from both Pits Nos. 4 and 5, it seems probable that these were contemporary deposits; may have been open at the same time, and each have served a necessary function in the cremation rites conducted at these two pits. Their separation by 5 or 6 feet from pits of the first mentioned symbolic ceremonial remains may indicate that there was advance knowledge of the first, which caused intentional removal to a respectful distance for this second group of pits. Otherwise, return to this sacred hill after many years of non-use would have erased all memory of former cremation events; might well have caused later pits to have intruded former ones.

ZONE 3 RECOVERIES (Age of Merger - forestation)

This period of occupation was attended by accelerated activity to judge from site remains. There were 16 stone hearths, one of which was extremely large having a diameter of about 6 feet, with heavily burned firestones ringing the enclosure. Much charcoal occurred within the enclosure, in which was a medium sized stone. This had split into forty-three fragments from exposure in hot fires. However, there were no calcined bone fragments or burnt artifacts to indicate use of the hearth as a crematory, so that its real function is still a mystery. As to artifact recoveries, there were nearly 6 times as many as in Zone 2, 183 all told of which 70 were projectile points.

Examination of the collection shows Small Triangular#5 points to be the most numerous with 37 specimens. Large Triangular points appear for the first time with 10 specimens; Leaf has one; Corner-notched, one; Corner-removed#3, two; Adena, one; Side-notched#6, three; Side-notched#1, 5, six; Tapered Stem, seven; and Eared, two. All four of the last mentioned types, as well as the Hand gouge, also present, overlap from Zone 2 and merge with the Large Triangular and other point types, together with the Crescent drill, which are new comers. In addition to these, a significant find in this zone was a Full Grooved ax. This also represents an overlapping from Zone 2, since it has appeared in stone bowl quarries of that period. Two important recoveries not occurring in lower zones are a Chipped ax and a War Club Prong; are found as innovations in Zone 3. But the most significant example of change is that of the stone bowl industry merging with the new art of pottery making. Here for the first time, potsherds of Stage 1 pottery appear with coarse mineral temper, cord-marked both sides and with a rounded irregular rim. Also, fragments of stone bowls are present, presumed to represent survivals from the stone bowl industry of Zone 2 times. For a radiocarbon date at the Horne Hill soapstone quarry, Society Bulletin, Vol. 27, No. 2, of 2,800 years ago leaves no doubt that stone bowl making took place during the preceding Zone 2 era. The advent of ceramics in Zone 3 denoting the beginning of this occupation, came much later in about A. D. 300. Illustrations have been made of these significant data, including Hammerstones, Abradingstones, knives, scrapers, Diamond and T-base drills, Whelk shell awls, and woodworking tools (Figs., 9, 10).

As already noted above, a worthwhile find was made in Zone 3 of a 3" long spear point, which exhibits the traits of an Adena type (Exhibit#24, Fig. 9). It is made of a good grade of quartzite; is carefully retouched along all edges with a long rounded base, an important Adena trait. It matches closely a 2⅞" long Adena point, Plate 19, p. 47 in *Mounds for the Dead*, by Don W. Dragoo, Pittsburgh, Pa., describing recoveries from burial 45, feature 25 from the Cresap Mound in the upper Ohio River Valley. Evidence at the Brookfield burial site, Society Bulletin, Vol. 27, No. 1, suggests that Adena migrants were trickling into New England with the arrival of ceramics or before, which would account for this evidence appearing in Zone 3. Evidently, new Adena cultural elements were merging at this time with those indigenous to this northeastern area.

Another piece of evidence to note in this zone is the appearance here for the first time of shellfish remains in the form of scattered fragments of shell. This is in agreement with evidence from the four Bay sites, already mentioned, and seems to indicate the adding of shellfish to the diet in Zone 3 times with the introduction of ceramics. Therefore, as might be expected, the Whelk shell awl appears at this level with 3 specimens and continues on the increase during the Zone 4 era.

ZONE 4 RECOVERIES (Ceramic Age - heavy forestation)

With the final period of occupation, recorded data shows a decided increase in the use of the site. While but one stone hearth appeared *in situ*, numerous scattered firestones throughout this zone indicate the former presence of possibly many more, which had been demolished, perhaps for some good reason that is not clear today. Another possibility is that open fires without stones were preferred with cobbles being used as pot boilers and as supports for holding clay pots upright in the fire. A goodly number of artifacts were recovered amounting to 340, which represents an increase of nearly ten times those from Zone 2. Of these, 130 are projectile points. The greatest number of any one kind consists of 72 Small Triangular#5 points, mostly of white quartz, while 28 Large Triangular points take second place. Smaller quantities of from 1 to 8 in number are distributed between 7 other types: Small Stem; Corner-removed#3; Corner-notched; Side-notched#3, 5, 6; and Tapered Stem. One Pendant and quantities of scrapers and knives are present, while the Crescent Drill is well represented. Also, the collection includes Hammerstones, War Club Prongs, woodworking tools, Whelk Shell awls, and potsherds of Stage 2 pottery with cord-wrapped-stick, and dentate designs. Representative specimens of these recoveries have been illustrated (Fig. 11).

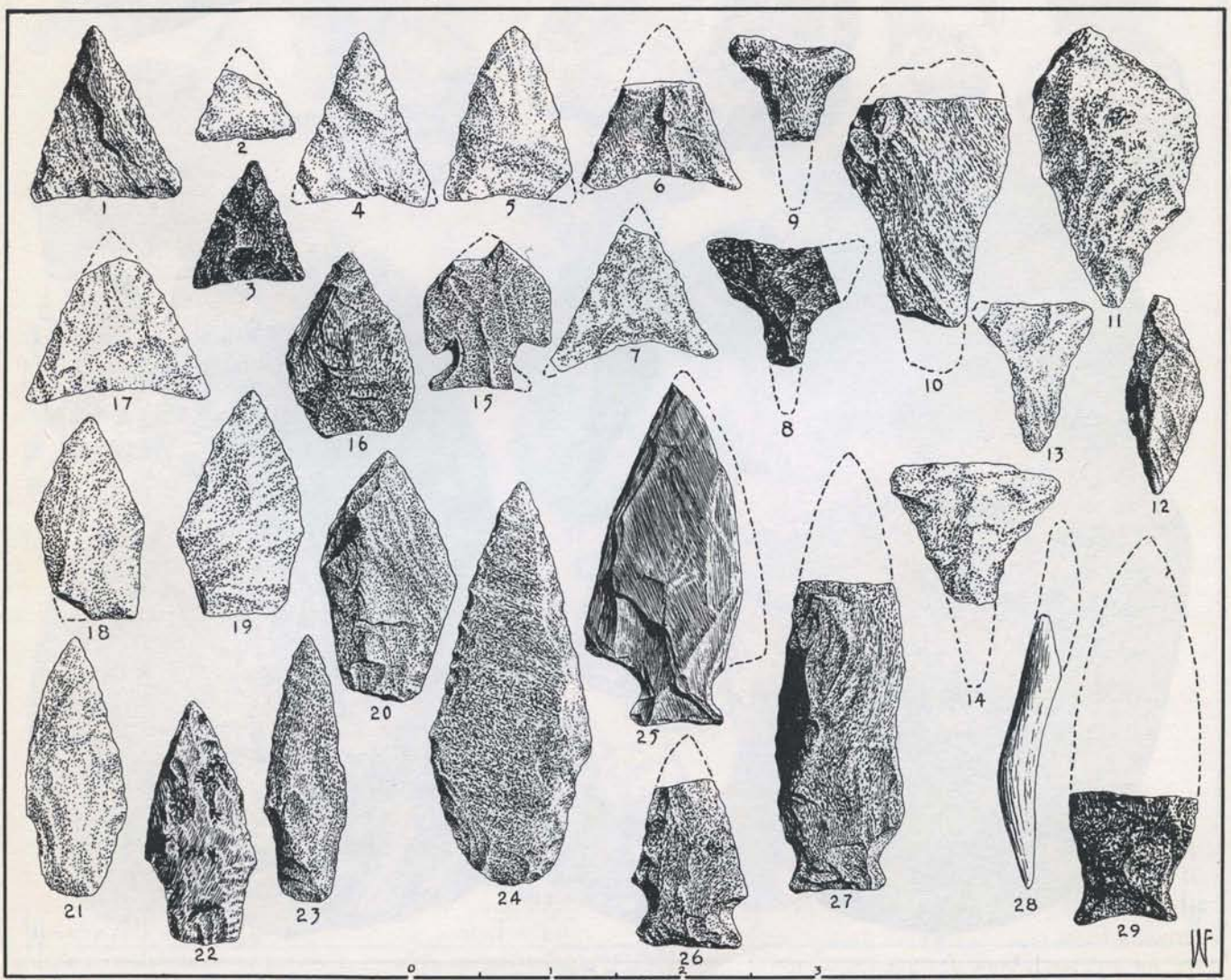

Fig. 9. ZONE 3 (Age of Merger), Flat River Site. 1-7, Small Triangular#5 Point; 8, 9, Crescent Drill; 10, 11, Pipe Bowl Reamer; 12, Diamond Drill; 13, 14, T-base Drill; 15, Corner-notched, 16, Leaf, 17, Large Triangular, 18-20, Tapered Stem, 21-23, Corner-removed#3, 24, Adena, 25, Side-notched#1, 26, 27, Side-notched#5, 29, Side-notched#6 Points; 28, Whelk Shell Awl.

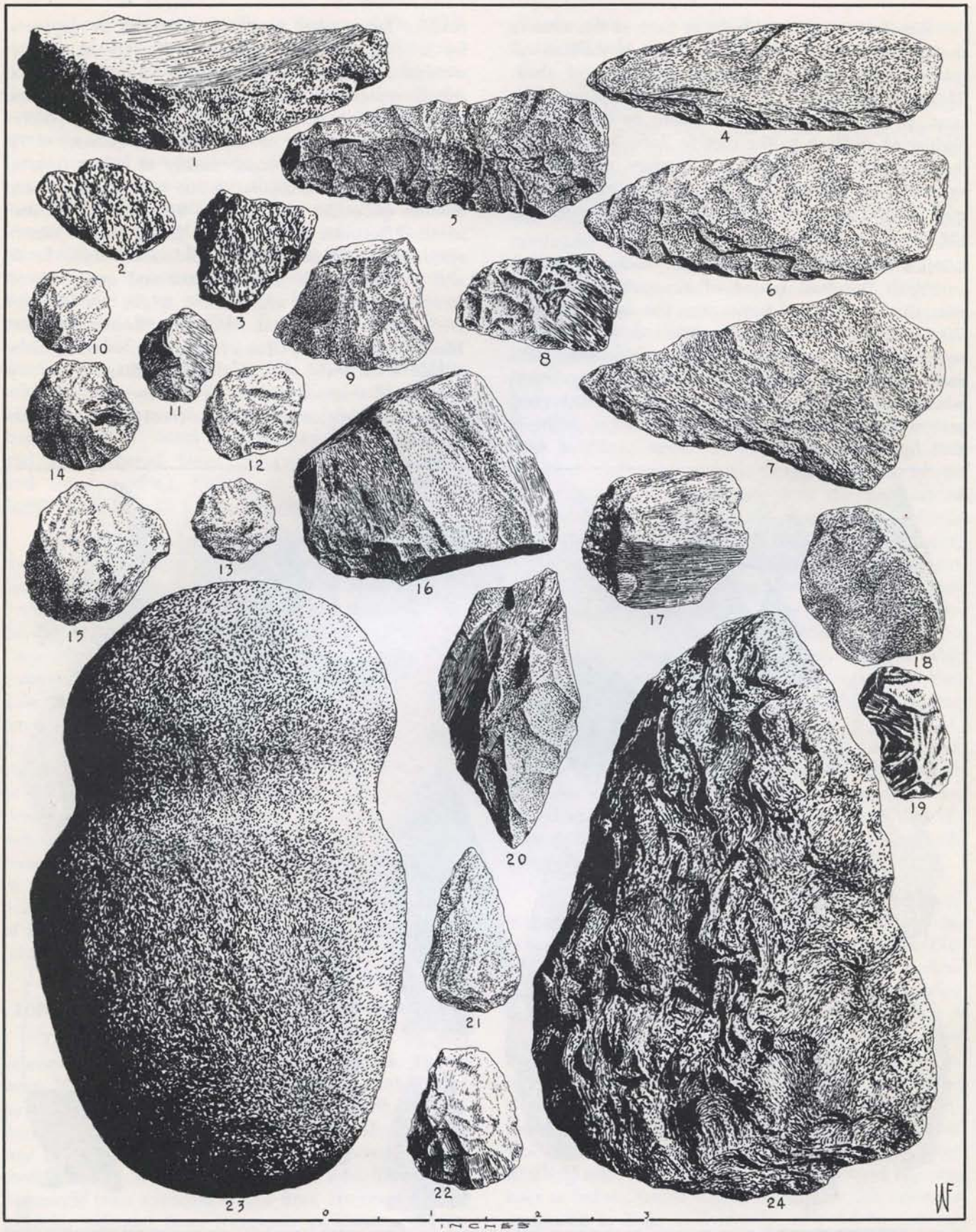

Fig. 10. ZONE 3 (Age of Merger), Flat River Site. 1, Stone Bowl Fragment; 2, 3, Potsherds — Stage 1; 4, Stemless, 5-7, Stem, 8, 9, Flake Knives; 10, 14, 15, Steepedge, 11-13, Flake, 21, 22, Stem Scrapers; 16, Hand Gouge; 17, Hammerstone; 18, 19, Shaft Scraper (woodworking); 20, War Club Prong; 23, Full Grooved Ax; 24, Chipped Ax.

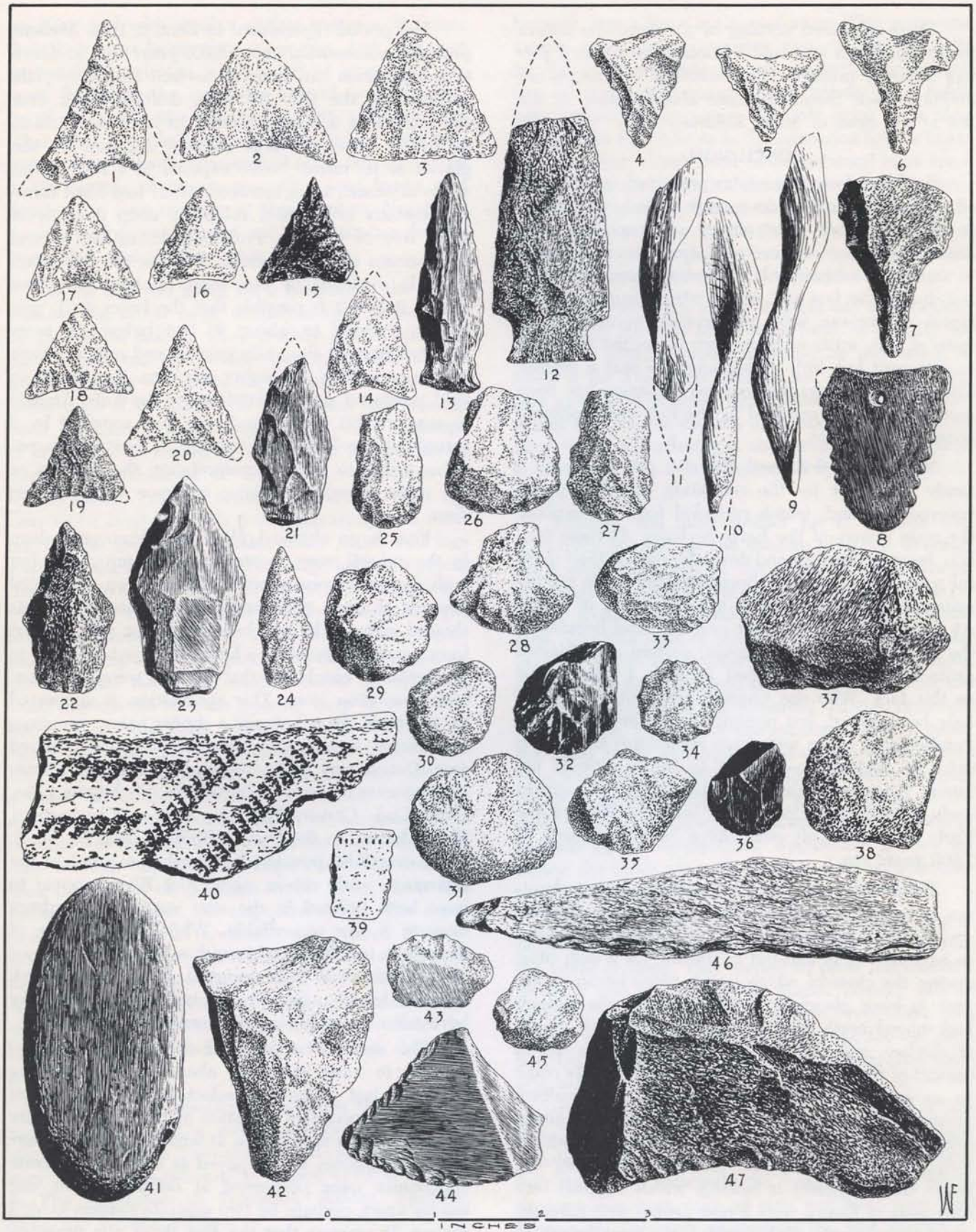

Fig. 11. ZONE 4 (Ceramic Age), Flat River Site. 1-3, Large Triangular Point; 4-6, Crescent Drill; 7, Flake Drill; 8, Pendant; 9-11, Whelk Shell Awl; 12, 13, Side-notched#5, 14-20, Small Triangular#5, 21, Corner-removed#3, 22, 23, Tapered Stem, 24, Small Stem Points; 25-28, 30, 32, Stem, 29, 31, 33, Steepedge, 34-36, 45, Flake Scrapers; 37, Shaft Scraper (woodworking); 38, Hammerstone; 39, 40, Potsherds — Stage 2; 41, Abrading-stone; 42, Pipe Bowl Reamer; 43, Flake Knife (haircutting?); 44, 46, 47, Flake Knife.

There appeared nothing of a spectacular nature in this zone, but it should be noted that Stage 2 pottery alone is present. The remaining two stages are absent, which should indicate abandonment of the site at the close of Stage 2 times.

CONCLUSION

Evidence from this site as presented, while limited in some respects, offers enough logical implications to create, if not an exact picture, a reasonable postulation of events that developed from one millennium to another. Generations of occupants came and went, but during the first half of the site's occupancy, long lapses of non-use were of common occurrence. In spite of this, artifacts have been deposited from age to age with but little disturbance, so that a reasonably sound stratigraphic culture sequence has been made possible, as revealed by the four archaeological zones of occupation.

When man first used the site, the area was a sandy plain left by the retreating glacier. Tundra covered the land, which provided food for caribou, the main quarry of the Early Archaics. As these caribou hunters plied up and down the river in their quest for game, they may have been attracted to the site because of existence there of a fresh spring of water. At times, high winds swept over the land because of the absence of a forest cover; certain sand-blasted artifacts, which lay exposed in Zone 1 sand, attest to this fact. Who the original occupants were may only be surmised, but presence in the lowest zone of Parallel stem points with traits resembling the Dalton point of Alabama — judged to be transitional between Paleo and Early Archaic times — suggests early arrivals who may have been the first of the Early Archaics. This could have been as ancient as 7,000 years ago.

Following them came more Early Archaic hunters in search of caribou. They preferred a different spear point, Corner-removed#8, and they are thought to have moved in and out of the site for a long time, during the close of which, scrub pines began to appear in some places. By 5,000 years ago the caribou had moved north after the tundra, following retreat of the ice, and the hunters had gone north too in pursuit of the caribou. Thus their use of the site came to an end. Diagnostic implements of their culture show no signs of overlapping into the next culture period of Zone 2, either in their original or modified forms. Therefore, evidence of racial continuity between the two zones is lacking, which suggests that occupants of Zone 2 were a new people with different racial backgrounds. Perhaps this is the most important observation to be made in comparing the evidence from these two zones.

The period represented in Zone 2, Late Archaic, probably commenced about 5,000 years ago, at which time forestation had sparsely covered the sandy plain surrounding the site. By then, drifting sands over the years had doubtless tended to level the surface, in which lenses of large pebbles dropped by the glacier in its retreat, were exposed in a few places, while in others, more modified winds had filled former blowouts to produce relatively deep deposits of sand, free of pebbles. Probably, during the several millenniums of Stage 2 times, because the site shows so little evidence of use, most hunters may have passed it by. It is possible that the lower field, previously referred to, about 40 feet below the more elevated wooded site at its western end satisfied these people more than the higher elevation. For the lower field produced enough artifacts of the Late Archaic to support this theory, and was well supplied by a spring-fed brook that ran nearby. At least, this hypothesis seems to fit the interpretation that follows of the most thought-provoking evidence uncovered in Zone 2.

Five large charcoal filled pits discovered deep in the subsoil were located in close proximity, but with no interference one with another. Sacrificial deposits of stone implements in the four largest pits showed signs of having been fire-burnt and cracked from exposure to extreme heat. This leads at once to the probable conclusion that the pits were associated with cremation rites. This speculation is supported by numerous pit remains of a similar nature previously reported from various sites in this New England area. Details may be had concerning them on Massachusetts sites at Assowampsett Lake, Cochituate Lake, Cape Cod, Carver, Dighton, and at Charlestown, Rhode Island, in the Society Bulletin, Vol. 28, No. 2. Some contained powdered red ochre as used in the ceremony, while others, as at Flat River, appear to have been utilized in the rites without it, perhaps because it was unavailable. While the evidence at this site is insufficient to furnish a complete sequence of events that may have occurred, enough is provided, it would seem, to permit speculation as to what may have taken place during the cremation ceremonies.

The shaman or priest of the people, who are thought to have had their abode in the low-lying Field site just referred to, selected the sandy and at that time unoccupied elevation of the Flat River site just above, as a sacred area at which to perform their ceremonies. Here, it is believed at least two separate ceremonies were performed at different times, not too far apart, perhaps by two separate shaman-guided groups. It appears that the first three pits probably were included in one cremation ceremony, since they were placed close together, two with peripheries

touching and with similar artifact contents. It seems that these two larger pits were dug, first, the spot having been selected because of its pure sand deposit. Probably, the sand was heaped up irregularly on all sides, with the hollowed-out pits touching each other. This provided two separate hollows, each estimated to have had a diameter of 50 or 60″, measured to the outside of their surrounding sand banks, and depths of a foot or more at their centers. Nearby, a smaller hollow was spaded out in preparation for the event that was to take place.

While this was going on, a member of the group was making rather large roughly shaped implements by percussion flaking. They crudely resembled those then in use, and were made from small slabs of soft quartzite schist — a stone not normally used for functional tools of the day. This stone stock had recently been brought in, it is thought likely, from outcrops of the material known to exist some 3 miles down stream and southeast of what is now Centerville, Rhode Island. Perhaps a dozen implements that appear to be symbolic tools were soon ready and waiting for the cremation to take place. Brush and logs were heaped up, filling the two large hollows to form the pyres. With this done, all was in readiness for the event. Next, dried bones of the dead were brought from the charnel hut, most likely wrapped in one or more bundles, and were placed on the two pyres. As the fire grew hotter the shaman threw the symbolic stone implements into the burning heap of wood and bones. This was done, evidently with the idea of furnishing these specially made symbolic tools for use by the departed in the next world. For there existed a belief in another world for the dead, where the material life of this world was to be continued. The shaman was the medium between the two worlds, and only through him and his magic could the common man be assured of salvation in the next, which was governed by unseen but respected spirits. The significance of the use of symbolic tools instead of functional ones can only be surmised. The idea could have been one of reverence for the dead, in furnishing tools specially made in oversized shapes, in order to impress the spirits with the importance of those deceased, and so gain more favors for them in the hereafter.

A fascinating comparison between this symbolic tool cremation and a similar ceremonial that took place in aboriginal Tasmania at close of the 19th century should be of interest. As related by H. Ling Roth in *The Aborigines of Tasmania*, Halifax, England, 1899, the account follows.

"Near the edge of the field or opening in the woods, where the deceased were gathered for the burning, was a large outcrop of stone. This stone was a soft, probably sedimentary material, totally unfit for the making of edged tools. Nevertheless, quantities of supposedly sharp edged knives were made here ceremoniously using this soft stone, and then placed with the cadaver in the cremation fire. In burning, the stone, which must have contained some trace of metal, gave off an iridescent greenish-blue flame, which was considered magical. Probably, the concept was that here was a magic stone, which would burn with the body thus passing into the same spirit world and therefore useful to the deceased."

Here is evidence of the tangible use by aborgines of symbolic specially made stone tools, as actually observed in modern times. It would be interesting to know if the Flat River tools of soft schisty quartzite, also gave off a peculiar light when burned. Whether or not this was so, the use of symbolism in the sacrificial rite of tool offering is abundantly verified and its presence at Flat River supported by the Tasmanian ritual.

Possibly, the third smaller pit at the site was subsequently used by the shaman after the burning, for a concluding part of the ceremony. Into this pit may have been sifted charcoal from the cremation remains, from which chunks of charcoal were eliminated. The idea back of this act may have been to placate the spirits by an offering of charcoal containing ashes of the deceased, and so receive sanction for the family or families of the departed. In this ritualistic performance, because of the existence of two pyres, the dried bones of more than one person may have been involved. Certainly, the evidence fails to support belief in the cremation here of green remains of the dead, since no particles of calcined bones remained to indicate partial incineration. Apparently, in this instance, the bones were dry as they were entirely consumed in these crematory pits.

Finally, a last act by shaman assistants was that of pushing sandy backfill, piled up around the pits, over the burnt remains. This tended to press the charcoal fill back into the irregularly shaped circular pits as found by the site excavation, and to cover them with 4 to 6″ of sand, thus placing their tops for the most part below Zone 2, in which, typologically, they actually belong.

This leaves the remaining Pits Nos. 4 and 5, still to be explained. As the evidence suggests, they may also have been crematories of a similar kind to those just described, although the ceremonies, of which they were a part, may or may not have been performed by the same shaman as the first. Certainly, whoever was responsible knew of the existence here of the other pits, because they were carefully avoided.

Selection doubtless was made of this location as being a recognized sacred hill that had a good depth of sand. However, because of the different nature of the sacrificial artifact offering, it is possible that another shaman with somewhat diverse rituals performed the ceremony. The radiocarbon date from Pit No. 4 of about 3,500 years ago does much to establish the age, doubtless of all 5 pits, and places these cremations in the Late Archaic Stone Bowl Age. For, from the Horne Hill soapstone quarry's radiocarbon date of 2,800 years ago, by extrapolation it appears that the stone bowl industry probably commenced at least 3,800 years ago; and that the Late Archaic Age may have had a beginning somewhat more than 1,000 years eralier before the industrial activity of stone bowl making had commenced.

Doubtless, ceremonial rituals at the last two pits were much the same as those of the first three, except that functional instead of symbolic implements were cast into the fire of at least the larger pit. The two posts that are believed to have been driven in beside the pyre of this Pit No. 5 suggest that they may have helped support a platform of some kind, on which were placed the bones of the dead. The other somewhat smaller one, Pit No. 4, may also be the remains of a crematory, as the 6″ knife found in it was badly burned and cracked even more than the artifacts from Pit No. 5. However, because of its smaller diameter and shallow proportions, it is also possible that its fill was taken, together with the knife, from Pit No. 5 and redeposited in it with accompanying rites. This would have taken place after the cremation had been completed, and so would in that event represent a secondary burial. At the end of the ceremony, both pits were covered over with their sandy backfill, and, in this way were buried 7 to 8″ below Junction, or 5 to 6″ below Zone 2. Altogether, this cremation complex of five pits appears as the most outstanding discovery made in this zone. Because of the Late Archaic projectile points found in Pit No. 5 and the symbolic contemporary Side-notched#1 blade in Pit No. 3, as well as the radiocarbon date of 3,500 years ago of Pit No. 4, it is evident that the entire complex belongs in the Late Archaic Age of stone bowl making. While no evidence of stone bowls appears in this zone, the symbolic tool resembling a Hand gouge of the industry in Pit No. 1 (Fig. 7,#2), and the End pick (Fig. 5,#16) from this zone's recoveries suggest an industrial association of stone bowl making.

In Zone 3, where appearance of Stage 1 potsherds indicates that this occupation commenced about A.D. 300, an accelerated use of the site for camping is disclosed by a greatly increased deposition of artifacts. With the appearance of stone bowl fragments and potsherds at this level, a merger of old with new ideas is very apparent; and in this case a replacement of industrial products. Also, the site by now had become more than an abode for hunters; was being used at times by the whole family, as seen by the presence of cooking vessels. The appearance here of many artifact types that are held diagnostic of the previous Stone Bowl Age, including stone bowl fragments, supports the belief that racial continuity exists and that the Late Archaics form the basic racial stock of Zone 3 times. Recovery of a Full Grooved ax in this zone is a good indicator of this culture overlapping; its source has been proven repeatedly to lie in the Late Archaic industrial Age. With the advent of pottery came the eating of shellfish for the first time, all of which is a part of this zone's evidence. By then, stone bowls were in disfavor, the quarries had closed down; women were the potters and were making cooking pots of the day in their own rights. While it was not apparent to the people of that period, an industrial revolution had quietly taken place; women had suddenly come into a position of power, which they had never known before.

In the meantime an event had been occurring from the time the quarries closed that marked the arrival of one new cultural influence. It was the influx of migrants from outside regions, who were merging their ideas with the established culture of this area. Due perhaps, as it is thought likely, to religious persecution by a forceful intrusion of new religious rites imposed by invaders from further west, some Adena shamans of Ohio apparently decided to move out. Led by these priests toward the close of Stone Bowl times, small groups of Adena dissidents seem to have left their Ohio homeland and moved east. Gradually they reached most all middle and northeastern coastal regions including parts of New England; their boatstone, Birdstone, Blocked-end and Cigar-shaped tubular pipes, and especially their extended full rounded based projectile point, all of which occasionally come to light, amply attest their presence. At Flat River, recovery of the 3″ Adena spear point in Zone 3 seems to indicate an Adena contact of some kind during this period of change. Such culture influxes must have made this age an interesting time in which to have lived. But tribal warfare had commenced, as indicated by appearance of the War Club Prong, and this infighting in time was to cause the culture of the day to decline in spite of industrial activity of the women in their making of pottery.

With arrival of Zone 4 times about A.D. 1000, as marked by appearance of Stage 2 potsherds, there was a noticeable increase in use of the site. Deep

forest growth, much as it is today, had come, and doubtless this forest cover proved an attractive inducement for more prolonged periods of settlement. Family groups were among those using the site during favorable hunting seasons. Clay pots were brought by the women, and with accidental breakage left their mark of Stage 2 ware upon this zone. But from all indications, it was never more than a forest site, with no strong sign of planting activities to indicate agricultural pursuits.

All potsherds recovered in the zone were from Stage 2 pots, which indicates abandonment of the site after several hundred years, before emergence of Stage 3 and 4 pottery. Possibly, as has been suggested, the spring at the gully had dried up by then, which made the location less attractive. And so, from one small site hidden away in deep woods, evidence has been produced revealing several provoking Archaic discoveries that extend down from earliest tundra times. May continued fact-finding research bring to light further discoveries to enlarge our knowledge of man's persistent struggle upwards.

Bronson Museum
December 1966

APPENDIX

Subsequent to closing of the dig, write-up of which is contained in this paper, there remained time for further excavation in the area before publication of the report. Preliminary work at the Field site, lying at the foot of the hill (Fig. 1), at the start of operations had covered only about 2,400 square feet on the front edge of this low-lying area. Sparse evidence of occupation found at this location led to the belief that at some time during the ages only a comparatively few people had lived there, perhaps just a small group or two at a time. The field differed from the hill in that it had been under cultivation years ago, with plowed disturbance in evidence throughout a 6 to 7″ deposit of loam down to the subsoil. Many artifacts recovered from it were noted to be projectile points of the Late Archaic, and this in itself suggested that further digging might produce additional data about this occupation, as found in Zone 2 on the hill above. Accordingly, most of the 1967 season was devoted to further excavation of the Field site. Here, more than twice the original excavated area was carefully dug, which carried the excavation past the center of the field.

Again, 1967 artifact recoveries from the disturbed loam appear to be mostly of Late Archaic affiliation, consisting of Side-notched#1 points and Stemless knives, many made of red argillite. But that which attracted the most attention was presence of more than 40 fragments of light-colored quartzite schist, which apparenly had been scattered by the plow throughout a localized area of about 600 square feet. Without this disturbance, they doubtless would have assumed a concentration of workshop proportions. They occurred in the plowed loam, and at Junction at bottom of loam, which evidently was their source. They consist of many small flakes with the flat face of cleavage showing on most, as well as broken slabs of the schist also with cleavage surfaces in evidence. Most of these slabs have worked edges roughly flaked, except where fracture occurred to prevent completion of the implement. Among them is one undamaged over-sized roughly worked Stem scraper, which together with a representative display of the schist waste is illustrated (Fig. 12).

What explanation can be offered to account for the presence of this quartzite waste? A quick review of the site evidence already presented will serve to call attention to recovery, on the hill, of implements made of quartzite schist, but in a badly burnt condition, found in Cremation Pits Nos. 1 and 3 (Fig. 6). Throughout the dig on the hill no pieces of this stone waste were found outside the pits to suggest on-the-spot manufacture of the implements, although a continual search was made. Therefore, localized discovery in the Field site below of similar quartzite schist, which matches closely both in texture and in its roughly chipped edges the burnt symbolic tools of the Cremation Pits, leads to a valid probability. It now seems evident that below the sacred hill on a flat plot bordered by a spring-fed brook was the workshop where the symbolic ceremonial tools were made. Here, a workman appears to have chipped out sacrificial implements for the cremation rites at Pits Nos. 1 and 3, of which a roughly flaked Stem scraper with symbolic proportions apparently was inadvertently left behind (Exhibit#3). And if this is so — which appears to be beyond a possible doubt — then the people who took part in the ceremonies, also probably lived on the Field site; recovery there of Late Archaic implements tends to strengthen this belief. Hence, the hypothetical assumption in the conclusion that the Field site was the home of the celebrants now becomes a likely reality.

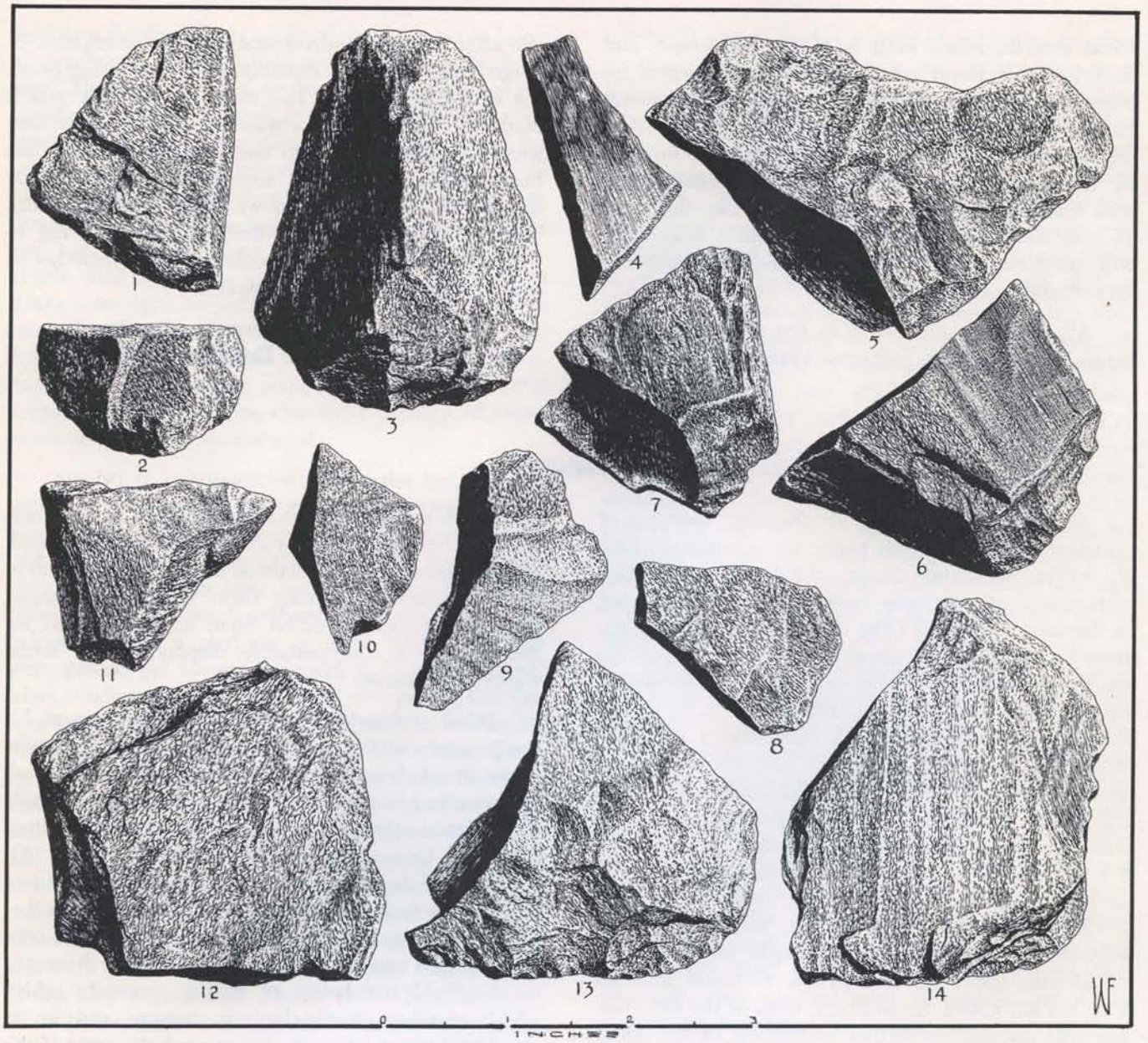

Fig. 12. QUARTZITE SCHIST WASTE, Field Site Workshop. 1, 2, 5-7, 12-14, Slab Fragments from Semifinished Artifacts; 3, Stem Scraper (roughly chipped and similar to workmanship of symbolic tools in Cremation Pits Nos. 1 & 3); 4, 8-11, Schist Flakes.

In a 1955 report about Indian River hillock cremation discoveries in New York State, Ritchie says: "The separated burial loci suggest the periodic performance of mortuary ritualism at a "sacred" area, by a group resident elsewhere in the region, for the habitation traces on both sites are too limited to account for more than a brief sojourning, while cremation and inhumation of the dead were accomplished." After a statement like this it is significant to note that at Flat River the home of the celebrants probably has now been loacted. This suggests that, as found here, the home site of participants in cremation ceremonies in other localities may well have been nearby on a lower level from that of the sacred hill, where the cremation was usually performed.